IN THE CLAIMS:

1-8.   (Canceled)

9.   (Currently Amended) ~~The method according to claim 8,~~ A method of alleviating congestion in a router when processing packets transmitted by computer systems having a congestion notification capability, said method comprising:

notifying said computer systems that said router is congested; and

dropping packets transmitted by said computer systems after said notification;

receiving, utilizing said router, a packet transmitted by a first computer system;

determining, utilizing said router, whether said packet was transmitted subsequently to a receipt by said first computer system of a marked packet;

in response to a determination that said packet was transmitted by said first computer system subsequently to said receipt of said marked packet, dropping, by said router, said packet;

in response to a determination that said packet was not transmitted subsequently to said receipt of said marked packet, forwarding, by said router, said packet;

in response to each receipt by said router of a packet transmitted by said first computer system, determining whether an identifier which identifies a connection between said first computer system and a second computer system is stored in a list of identifiers within said router;

in response to a determination that said identifier which identifies said connection is stored in said list, determining that said packet was transmitted subsequently to said receipt of said marked packet;

in response to a determination that said identifier which identifies said connection is not stored in said list, determining that said packet was not transmitted subsequently to said receipt of said marked packet and storing said identifier in said list within said router;

including with said identifier a time stamp indicating a current time said packet was received by said router;

wherein the step of determining whether said packet was transmitted subsequently to said receipt of said marked packet further comprises the steps of:

in response to each receipt by said router of a second packet transmitted by said first computer system, determining whether said identifier is stored in said list; and

in response to a determination that said identifier which identifies said connection is included in said list, determining that said second packet was transmitted subsequently to said receipt of said marked packet;

wherein the step of in response to a determination that said identifier which identifies said connection is stored in said list, determining that said packet was transmitted subsequently to said receipt of said marked packet further comprises the steps of:

in response to a receipt of said second packet, calculating a transmission time;

determining whether a current time is greater than said transmission time;

in response to a determination that said current time is greater than said transmission time, determining that said second packet was transmitted subsequently to said receipt of said marked packet; and

in response to a determination that said current time is equal to or less than said transmission time, determining that said second packet was not transmitted subsequently to said receipt of said marked packet.

10.   (Previously Presented) The method according to claim 9, further comprising the step of calculating said transmission time by adding said time stamp to a round trip time, said round trip time being a time required for a packet to travel from said first computer system to said second computer system and back to said first computer system.

11-18. (Canceled)

19.   (Currently Amended) ~~The product according to claim 18,~~ A computer program product for alleviating congestion in a router when said router is processing packets transmitted by computer systems having a congestion notification capability, said computer program product comprising:

instructions for notifying said computer systems that said router is congested;

instructions for dropping packets transmitted by said computer systems after said notification;

instructions for receiving, utilizing said router, a packet transmitted by a first computer system;

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instructions for determining, utilizing said router, whether said packet was transmitted subsequently to a receipt by said first computer system of a marked packet;

in response to a determination that said packet was transmitted by said first computer system subsequently to said receipt of said marked packet, instructions for dropping, by said router, said packet;

in response to a determination that said packet was not transmitted subsequently to said receipt of said marked packet, instructions for forwarding, by said router, said packet;

wherein said instructions for determining whether said packet was transmitted subsequently to said receipt of said marked packet further comprises:

in response to each receipt by said router of a packet transmitted by said first computer system, instructions for determining whether an identifier which identifies a connection between said first computer system and a second computer system is stored in a list of identifiers within said router; and

in response to a determination that said identifier which identifies said connection is stored in said list, instructions for determining that said packet was transmitted subsequently to said receipt of said marked packet;

in response to a determination that said identifier which identifies said connection is not stored in said list, instructions for determining that said packet was not transmitted subsequently to said receipt of said marked packet and storing said identifier in said list within said router;

instructions for including with said identifier a time stamp indicating a current time said packet was received by said router;

wherein said instructions for determining whether said packet was transmitted subsequently to said receipt of said marked packet further comprises:

in response to each receipt by said router of a second packet transmitted by said first computer system, instructions for determining whether said identifier is stored in said list; and

in response to a determination that said identifier which identifies said connection is included in said list, instructions for determining that said second packet was transmitted subsequently to said receipt of said marked packet;

wherein said ~~instruction means~~ instructions for in response to a determination that said identifier which identifies said connection is stored in said list, determining that said packet was transmitted subsequently to said receipt of said marked packet, further comprises:

in response to a receipt of said second packet, ~~instruction means~~ instructions for calculating a transmission time;

~~instruction means~~ instructions for determining whether a current time is greater than said transmission time;

in response to a determination that said current time is greater than said transmission time, ~~instruction means~~ instructions for determining that said second packet was transmitted subsequently to said receipt of said marked packet; and

in response to a determination that said current time is equal to or less than said transmission time, ~~instruction means~~ instructions for determining that said second packet was not transmitted subsequently to said receipt of said marked packet.

20.   (Currently Amended) The product according to claim 19, further comprising ~~instruction means~~ instructions for calculating said transmission time by adding said time stamp to a round trip time, said round trip time being a time required for a packet to travel from said first computer system to said second computer system and back to said first computer system.

21-28. (Canceled)

29.   (Currently Amended) ~~The system according to claim 28,~~ A router system for alleviating congestion when processing packets transmitted by computer systems having a congestion notification capability, said router system having at least one router adapted to perform the steps of:

notifying said computer systems that said router is congested,

dropping packets transmitted by said computer systems after said notification;

receiving a packet transmitted by a first computer system;

determining whether said packet was transmitted subsequently to a receipt by said first computer system of a marked packet;

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in response to a determination that said packet was transmitted by said first computer system subsequently to said receipt of said marked packet, dropping said packet;

in response to a determination that said packet was not transmitted subsequently to said receipt of said marked packet, forwarding said packet;

in response to a determination that said identifier which identifies said connection is not stored in said list, determining that said packet was not transmitted subsequently to said receipt of said marked packet and storing said identifier in said list within said router;

including with said identifier a time stamp indicating a current time said packet was received by said router;

wherein determining whether said packet was transmitted subsequently to said receipt of said marked packet further comprises:

in response to each receipt by said router of a second packet transmitted by said first computer system, determining whether said identifier is stored in said list; and

in response to a determination that said identifier which identifies said connection is included in said list, determining that said second packet was transmitted subsequently to said receipt of said marked packet;

in response to a receipt of said second packet, calculating a transmission time; determining whether a current time is greater than said transmission time;

in response to a determination that said current time is greater than said transmission time, determining that said second packet was transmitted subsequently to said receipt of said marked packet; and

in response to a determination that said current time is equal to or than said transmission time, determining that said second packet was not transmitted subsequently to said receipt of said marked packet.

30.   (Previously Presented) The system according to claim 29 wherein the router is further adapted to perform the step of:

calculating said transmission time by adding said time stamp to a round trip time, said round trip time being a time required for a packet to travel from said first computer system to said second computer system and back to said first computer system.